WHY PUBLIC LIBRARIES NEED GREATER BROADBAND

ALAAmericanLibraryAssociation

Presentation to the FCC

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Summary

- Public Libraries have become social and economic hubs for the users in their communities, providing the only Internet access for many low-income and elderly people, students, job-seekers, and others.

- Public libraries are suffering a significant shortage of broadband connectivity due to a lack of affordable capacity and an explosion of Internet demand.

- Broadband connections are sometimes not available or too expensive, and government and industry are often unaware of libraries' needs.

- Much more needs to be done, by both the library community and policy-makers, to help libraries improve their broadband connections to provide the services their users need.

Two Studies

- Libraries Connect Communities: Public Library Funding & Technology Access Study

  (ALA and Florida State University)(August 2007)
  http://www.ala.org/plinternetfunding

- Public Library Connectivity Project (July 19, 2007)
  http://www.ala.org/ala/washoff/oitp/papersa/public_version_final.pdf

- Both reports were funded by the ALA and the Bill & Melinda Gates Foundation but do not necessarily reflect the views of the Foundation.

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Why Care about Public Libraries?

Public Libraries

- Provide the only "no fee" access to computers and the Internet to millions of people.
- Offer computer and Internet training and support.
- Provide educational resources.
- Help people find employment.
- Provide access to E-Government services.
- Provide disaster services and support.
- Can serve as the economic and social hub of their communities. ("Anchor tenant")

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Basic Facts about Public Libraries

- Less than 3% of the U.S. population is without library service.
- Nearly 59% of libraries serve communities with fewer than 10,000 residents.
- Another 19.2% serve communities with between 10,000-24,999 residents (for a total of 78.2% of libraries serving communities under 25,000 population).
- For the most part, these communities are rural.

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Public Libraries and Computers

- 99% of public libraries provide access to computers and the Internet with no fee.
- 73% of public libraries indicate that they are the only "no fee" public Internet access point in their communities.
- The "average" public library has 10.7 computers.

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Demand for Internet Access: Increasing and Overwhelming

- 80% of public libraries report that they have fewer computers available than patrons who want to use them at least some of the time.
- 52% of public libraries report that their Internet bandwidth is insufficient to meet the demand some or all of the time, an increase of 10% in one year.
- Demand tends to immediately outpace supply as soon as any new connection is put into service. Librarians are always playing catch-up.

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What is Driving the Demand? Society and the Economy

- Over 90% of school districts are assigning homework that involves Internet use.
- The majority of top-100 retailers only accept electronic and online job applications.
- E-Government - government agencies increasingly requiring online-only interactions with citizens for information, applications, appointments, and more.

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What Else is Driving Demand? Video

- Video and audio streaming increased 14.3% last year alone.
  - Libraries increasingly use video training for their staff to reduce travel costs. (videoconferencing)
  - Students increasingly rely on videos of class lectures from their college or university (distance learning)
  - Some state and local governments require video training (e.g. to obtain a driver's license.)
  - Web2 applications, participatory and interactive sites are increasing in use.
  - Streaming health and business information

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The Wi-Fi Dilemma

- 54% of libraries now have Wi-Fi capability, up from 18% in 2004. Users "expect" the library to have wireless access. But the prevalence of Wi-Fi makes the connectivity problem even worse, as users bring their own laptops to the library and add to the demand on an already-stressed system.
- Only 17% of libraries with wireless access have separate connections for wireless and wired computers. Most Wi-Fi computers share broadband capacity with the "wired" computers, which slows down the connection speed for everyone.
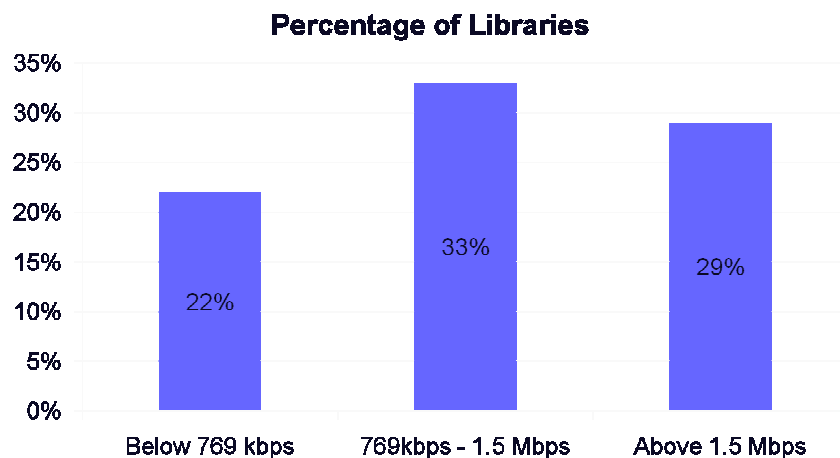
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Problems Caused by
Slow Internet Access

- Inability to complete online applications in a timely manner.
- Inability to access bandwidth-intensive interactive Web 2.0 content.
- Libraries shut down services and site access
    - Streamed content
    - Chat (used by online reference, distance learning, tutor.com).
- Inability of librarians to provide reference services due to slow access.
- Librarians do not consider offering new services because the lack of connectivity makes it impossible to imagine how these new services could be provided.
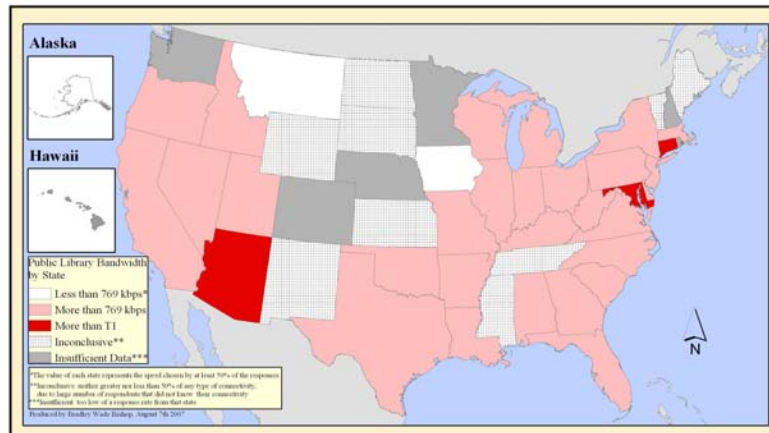
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Public Libraries and Broadband

Percentage of Libraries

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Public Library Bandwidth by State

Public Libraries Have Difficulty Acquiring More Broadband

- 56% of state librarians said at least some of their libraries cannot acquire any additional broadband capacity;

- 49% of state librarians said at least some of their public libraries cannot afford to increase their bandwidth.

Factors Inhibiting Adequate Broadband to Libraries

- **Price:** The cost of a simple T1 connection (1.5 Mbps) is over $1000/mo. in some areas (compared to $39.99/mo offered to homes served by Verizon's FiOS network.) Libraries have few competitive alternatives, so there is little market reason for broadband providers to lower prices.

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Factors Inhibiting Adequate Broadband to Libraries

- **Other Costs:** The price of the broadband circuit is not the only cost of upgrading the connection. Other costs include new equipment (e.g. routers) to work with the broadband connection, additional training and maintenance of the local network, and adding facilities or space for the additional equipment, and sometimes the cost of upgrading the existing computers.

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Factors Inhibiting Adequate Broadband to Libraries

- **E-Rate**: ALA's goal is to increase library participation in the federal E-rate program well beyond the 51% who reported filing an individual application. Research has shown that barriers to participation include:

- - Complexity of the application process: Although thousands of libraries apply for and depend upon E-rate funding, thousands more cannot benefit fully from this program because of the burdensome application and disbursement process.

- - Inadequate discounts and funding: the current formula for discounting the poverty rate for libraries doesn't accurately reflect many libraries' true need.

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Factors Inhibiting Adequate Broadband to Libraries

- **Availability:** Some areas simply cannot purchase any high-speed connection at all. One library says it waited 3 years just to acquire a T-1. Especially in rural areas, the demand of a single local public library is not sufficient to convince the telephone or cable company to build a broadband pipe in that community.

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Factors Inhibiting Adequate Broadband to Libraries

- **Industry's Lack of Understanding**: In most states, the telecom and cable industries were completely unaware of the broadband needs of libraries. Their attitude was that the libraries simply needed to place a phone call and order more capacity.

Factors Inhibiting Adequate Broadband to Libraries

- **Local Government's lack of awareness**: Local and state government leaders often do not appreciate the broadband needs of libraries. State government networks sometimes are reluctant to make their broadband capacity available to public libraries, or view libraries as "secondary" users (e.g., shut down the state network for maintenance on the weekends when libraries are busiest).

Recommended Strategy #1: Set a Goal of a Minimum of a Dedicated T1 to Every Library

*   Many libraries are struggling to meet the demands of their patrons with a DSL connection or shared T1 connection that offers less than 1 Mbps. Even a T1 connection is insufficient for larger libraries.

*   The ALA is seeking to ensure that every public library has at least a dedicated T1 connection.

Recommended Strategy #2: Encourage Consortia

*   Public Libraries that aggregate their purchasing power through state or region-wide consortia tend to have higher broadband connectivity.

*   State or regional consortia allow libraries to engage in shared costs and services, joint planning, and build a better business case for broadband providers to serve them.

*   The ALA is working with public libraries to help them form consortia where they do not currently exist.

Recommended Strategy #3: Technical Assistance and Planning

*   Public Libraries need technical and planning assistance to address the increasing demand for broadband Internet access.

*   The ALA is working with state library systems and others to address this need.

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Recommended Strategy #4: Educate Policy-Makers and Industry

*   Local and state government officials and the broadband industry were often unaware of the role played by public libraries and their needs for broadband connectivity.

*   The Connectivity Report recommends a public awareness campaign to increase the visibility of public libraries and to support their mission and broadband needs.

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Recommended Strategy #5:
Simplify the E-Rate Process

- ALA has proposed a strategy for streamlining the E-rate application and disbursement process, filed under FCC WC Docket No. 02-6.

- A streamlined process would dramatically increase the ability of small, independent libraries to take full advantage of this essential program.

Recommended Strategy #6:
Permit State and Local Government Broadband Networks

*   Libraries often use state and local government broadband networks because they aggregate demand , share costs and thus offer lower prices.

*   Even where public libraries choose not to use the state or municipal network, the availability of an alternative broadband provider helps the public library obtain better terms of service from the private sector broadband provider.

Recommended Strategy #7: Pro-Active Broadband Policies

- The marketplace, particularly in rural areas, is not satisfying libraries' needs.

- Lack of broadband access is a national issue requiring the attention of all levels of government – Federal, State and local. Filing taxes on-line, disaster relief, education, medical services (all roles that public libraries serve) are national issues.

- Some states have taken steps to promote broadband (through, for instance, matching grant programs, mapping, tax credits, etc.). Other states need to take more pro-active steps to promote broadband connectivity.

- ALA urges the Federal government to set forth a vision and national plan to encourage greater broadband deployment.

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Conclusion

- Technology is bringing more – not fewer – people to public libraries.
- With more than 16,000 public library buildings, libraries are located in most neighborhoods.
- Education and job-seeking services are the top two uses of public Internet service that library staff rank as critical to their community.
- Improved broadband connectivity in public libraries means improved Internet services for the general public in every community.

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